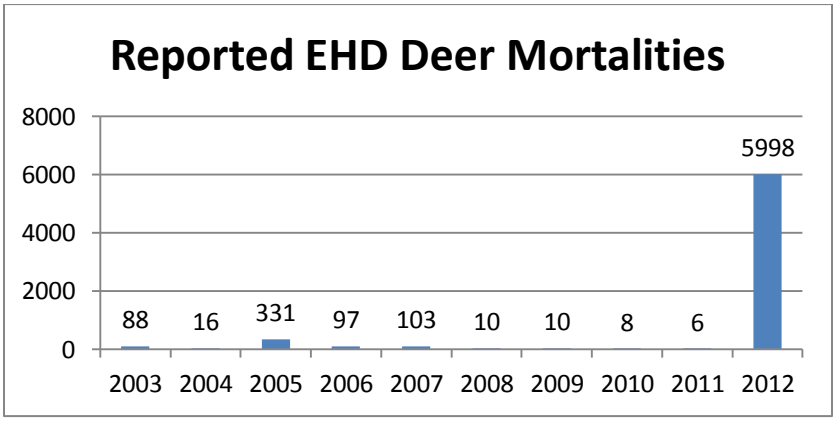
Epizootic Hemorrhagic Disease (EHD)

Epizootic Hemorrhagic Disease (EHD) is a disease caused by viruses in the genus *Orbivirus*. It is transmitted to deer by biting midges of the genus *Culicoides*. Both white-tailed deer and mule deer are susceptible to EHD, but white-tailed deer seem to be more vulnerable. Cattle can be infected by the virus but rarely die from it. EHD is not known to infect humans. This disease most commonly occurs in the late summer and early fall. The timing of this disease is most likely related to the abundance of the midge vectors, with the disease usually ending after the first frost. EHD can be acute, leading to death quickly with deer in good body condition and coat. It may also be chronic with the deer becoming emaciated and lame. Clinical signs are therefore widely varied. They may include fever, hemorrhaging around the orifices and lack of fear of humans. Generally, high fevers lead deer to water before they die. However, this may not always be the case where die-offs occur over a large geographic region. A confirmed diagnosis requires fresh lymph nodes or blood from sick or freshly killed deer exhibiting clinical sings.

Deer mortalities were first recorded in Nebraska in the early 1950's. There has been some level of the disease present in the deer population since then. The largest recorded outbreak occurred in 1976 when between 30 to 40 percent of the deer population was estimated to have died. The last 10 year reporting level of deer mortality is presented in the following table.



Reports of deer mortality this year began in mid-July and as of October 26, a total of 5,998 dead deer have been reported. The bi-weekly mortality reporting is presented in the below graph. This year's level of reporting may indicate a fairly significant event (see map below). Serotypes EHD-2 and EHD-6 have both been isolated by the diagnostic laboratory. Biologists won't be able to determine the impact of the disease on regional populations until after the close of the deer seasons when harvest data can be examined.